

# Installing Cygwin on an MS Windows System

Cygwin offers a Linux-like environment for your MS Windows system. In addition to allowing SSH access from Windows machines into the NAS environment, Cygwin can compile user code and function like a normal standalone Linux machine.

Installing Cygwin typically requires admin rights on the machine you are installing on.

A method of installing without admin rights can be found at:

<https://cygwin.readthedocs.io/en/latest/install/>

## Installing

The latest installation program for Cygwin can be found at: <https://www.cygwin.com>

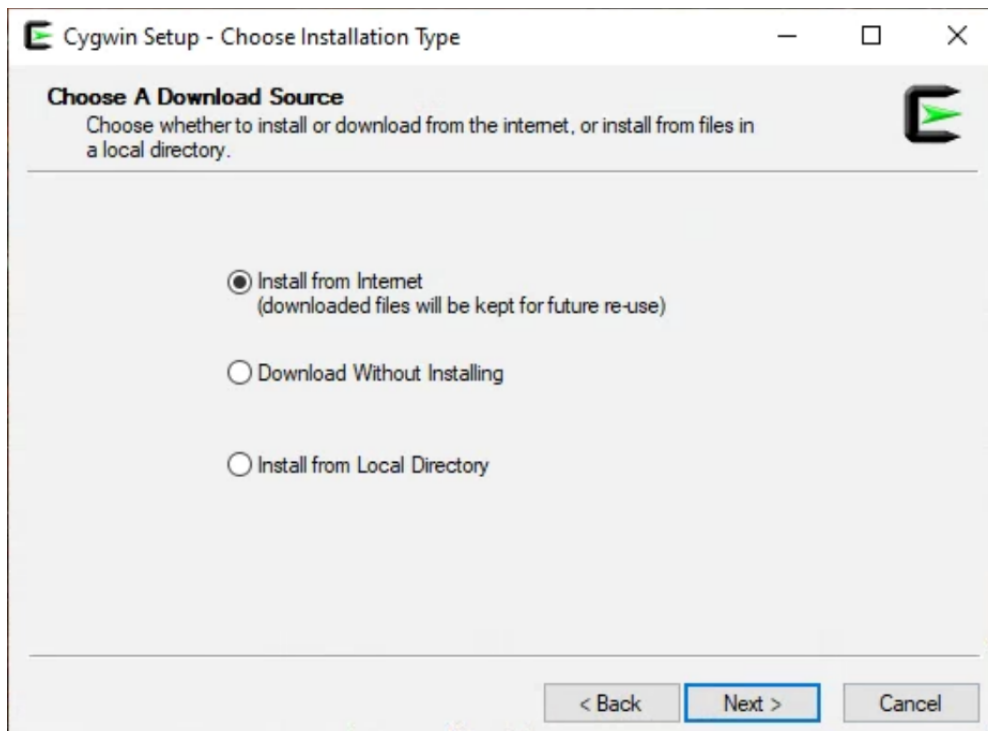
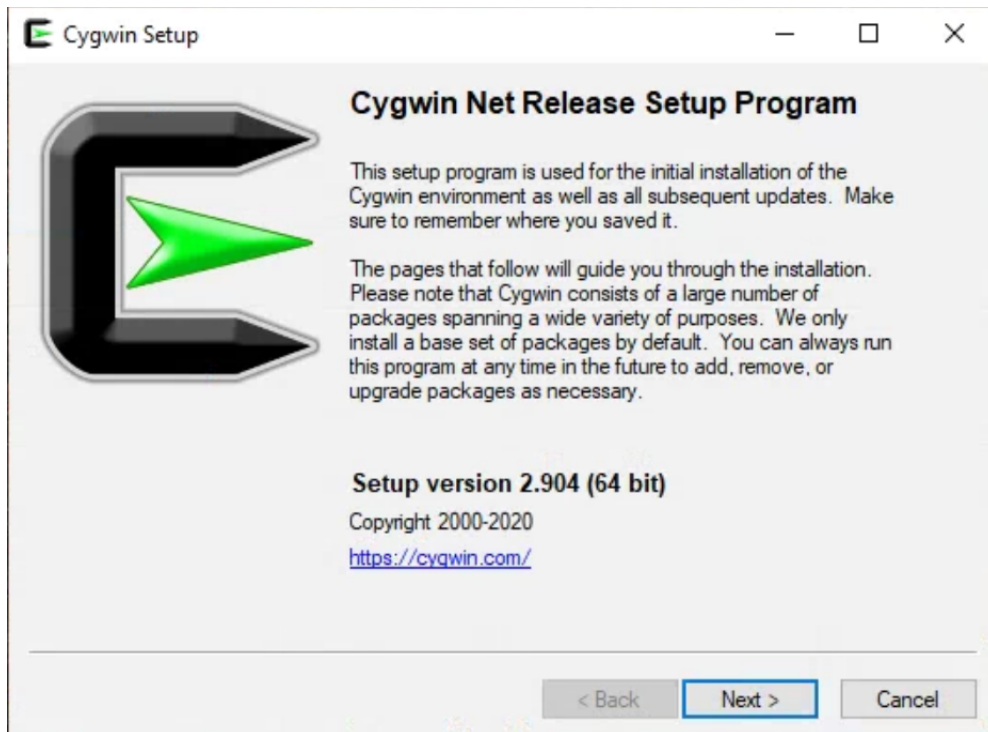
Download the setup-x86\_64.exe binary to your local machine.

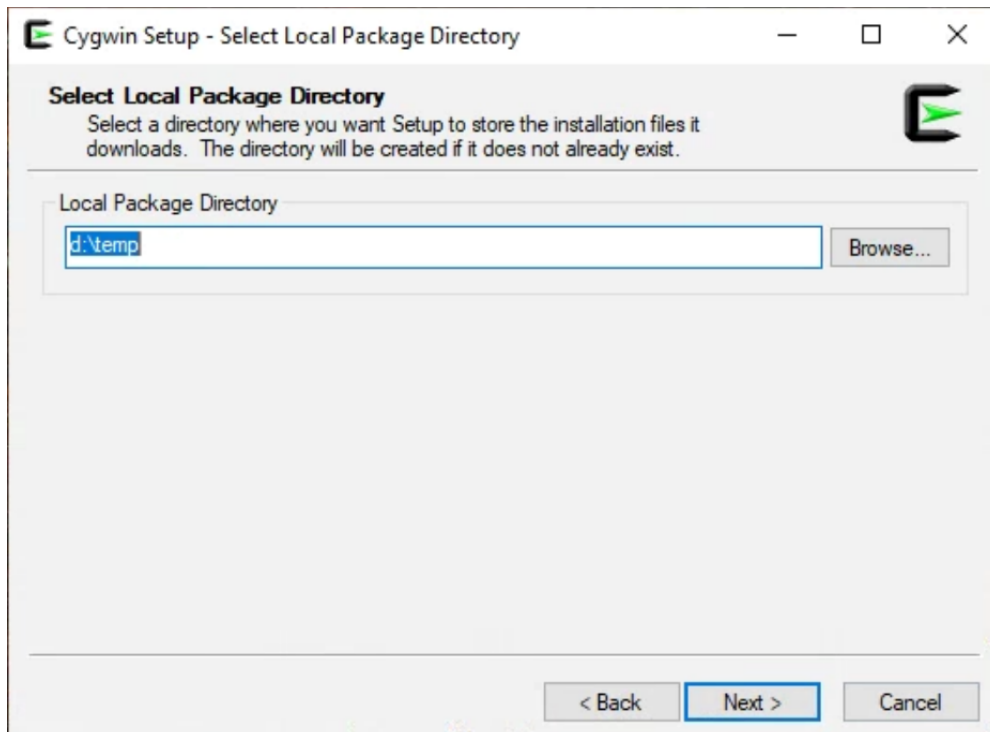
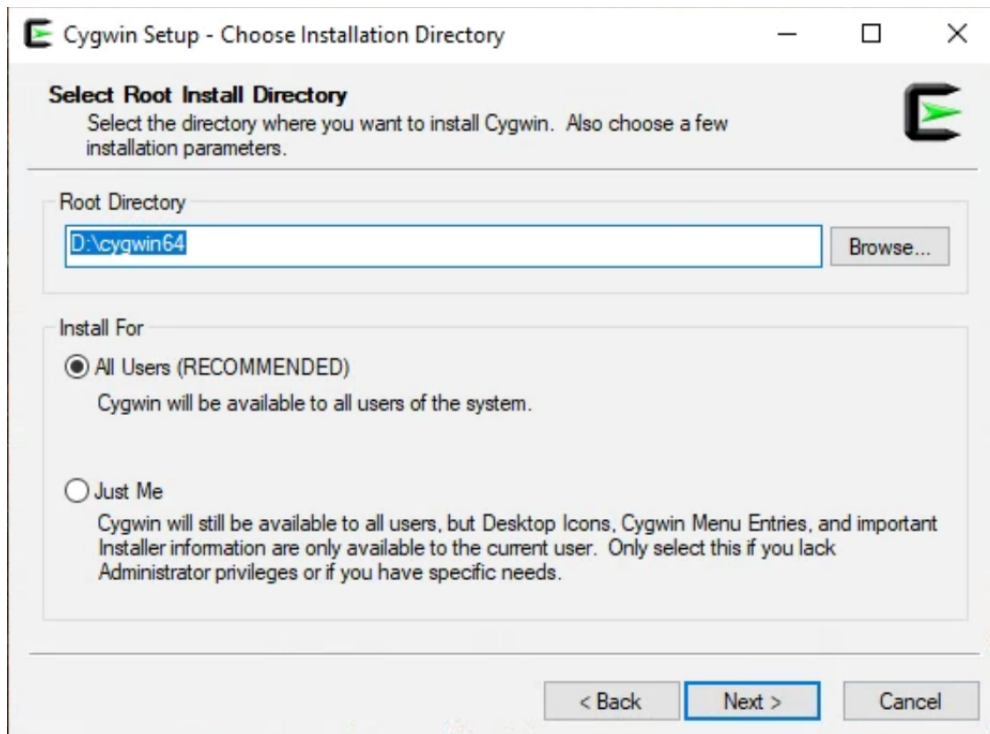
Running this .exe file will bring up a series of screens that will walk you through the installation process.

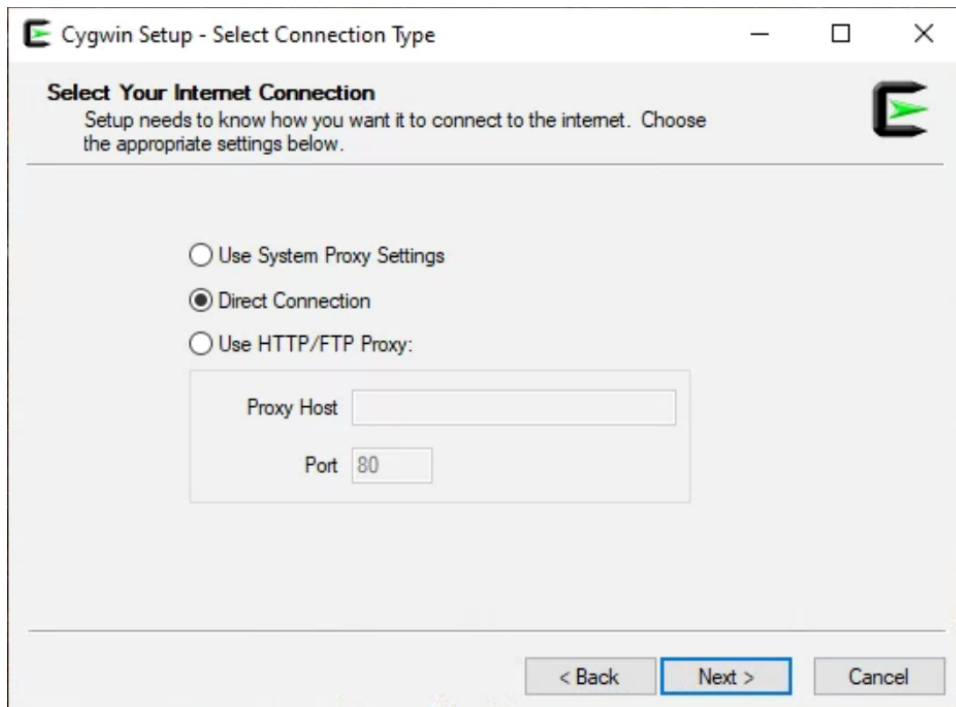
The two main things to determine ahead of time are where you want to install Cygwin, and where you want to save the installation files, as the setup program will download all the installation files ahead of time before starting the installation process.

In the following example, all the installation data are downloaded first to the d:\temp folder, and then the packages are installed into the d:\cygwin64 folder.

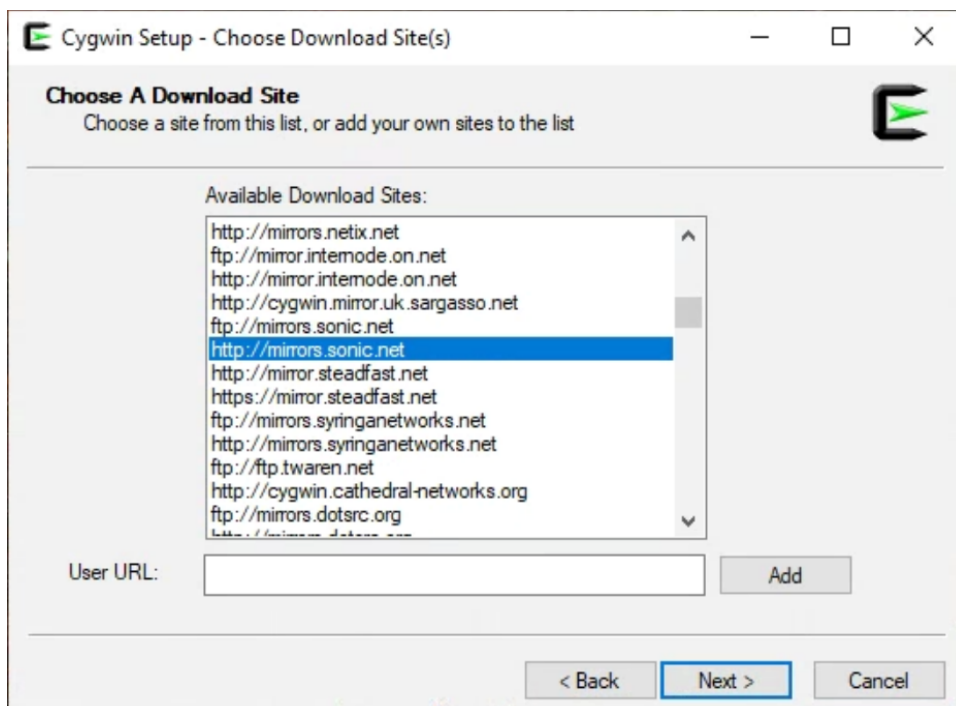
The screenshots on the next few pages show you what the installation process looks like.



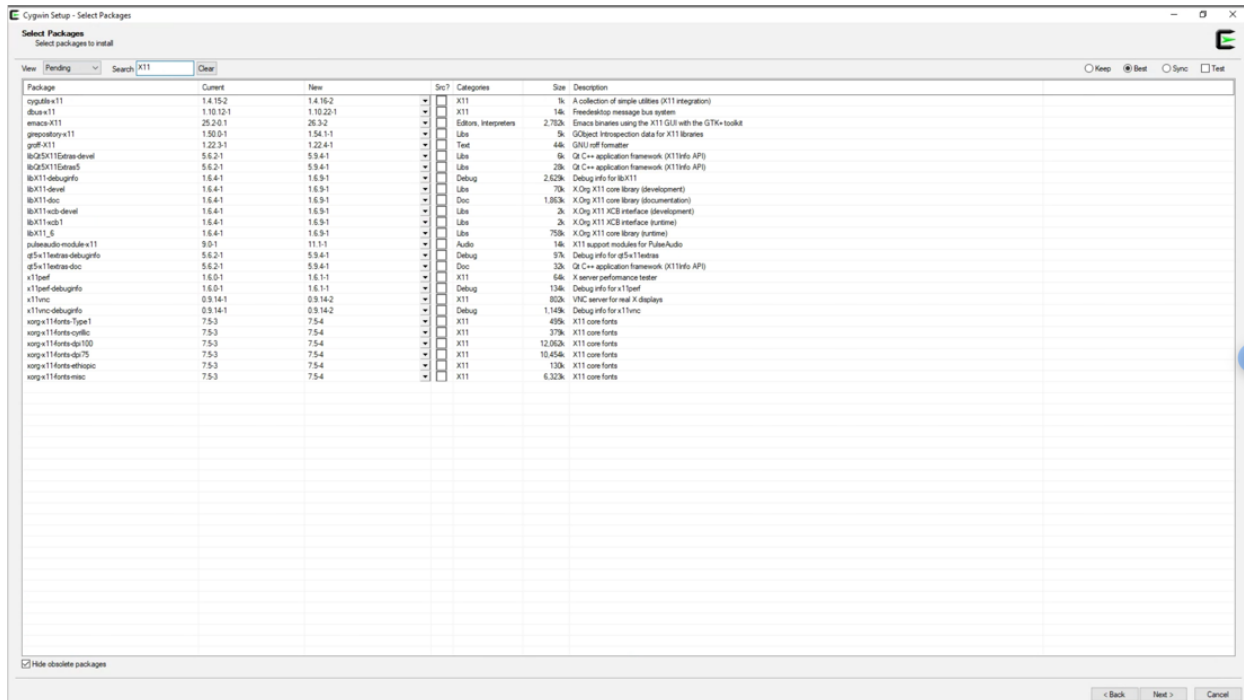
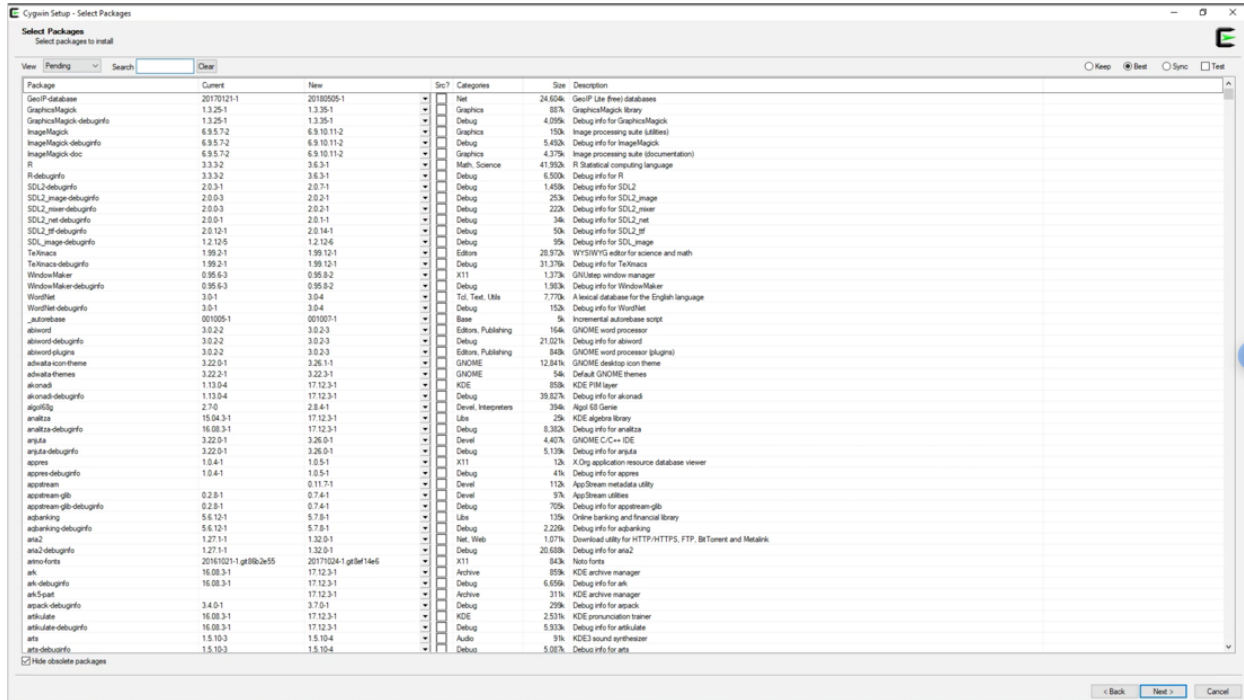


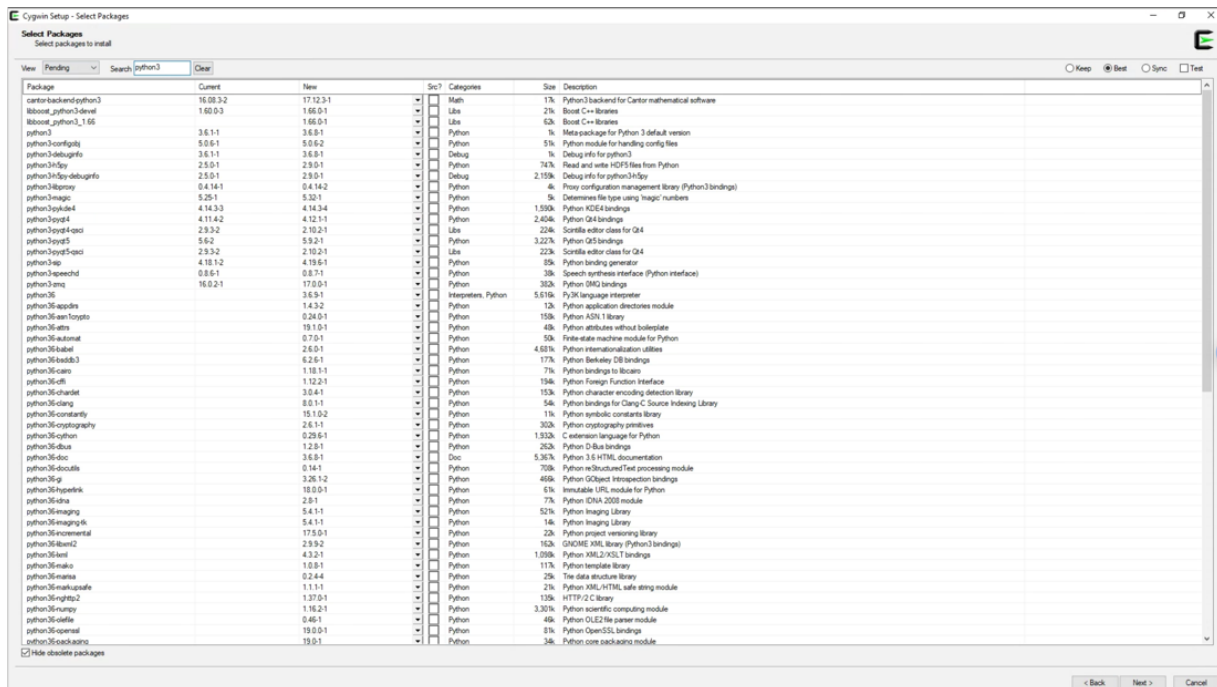


The next screen will give a selection of sites to download the installation packages from. It should default to the site closest to your current location. You are free to choose another if you know it will be a faster connection. If unsure, try the default; if that seems particularly slow compared to your local internet connection speed, you can back up to this screen and try another. The kernel.org sites are generally a valid option.

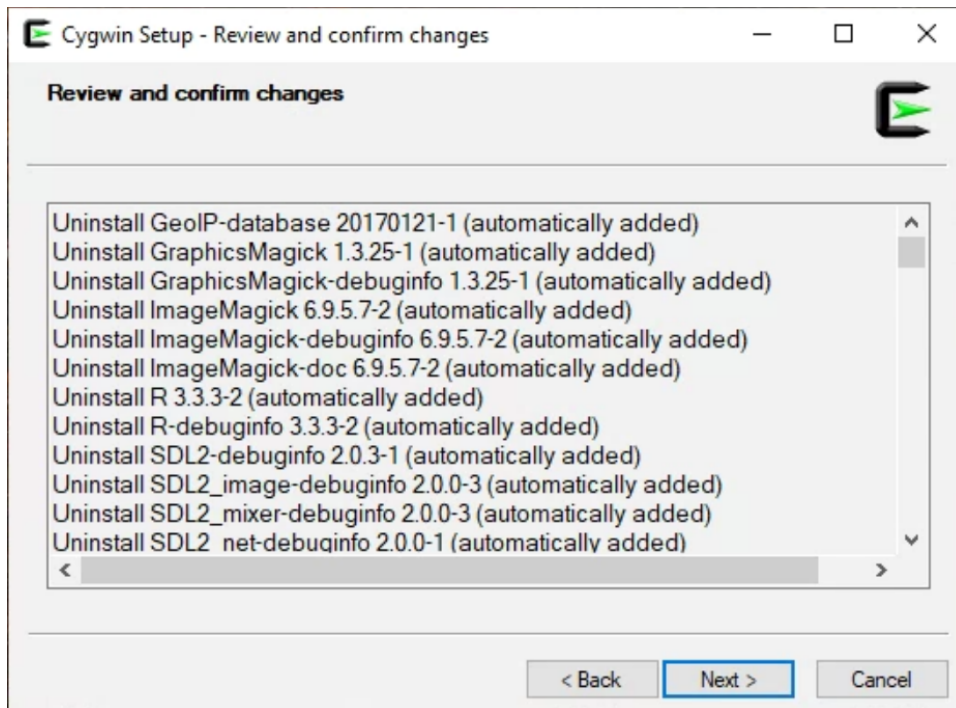


The next screen will show you a list of all the features to be installed. We suggest installing everything that is selected by default. If there is a particular package you know you want that is not part of a normal Linux machine, you can search for that package and make sure it is selected here. You may need to change the “View” selection, as the default shows only those packages that are “pending” installation.



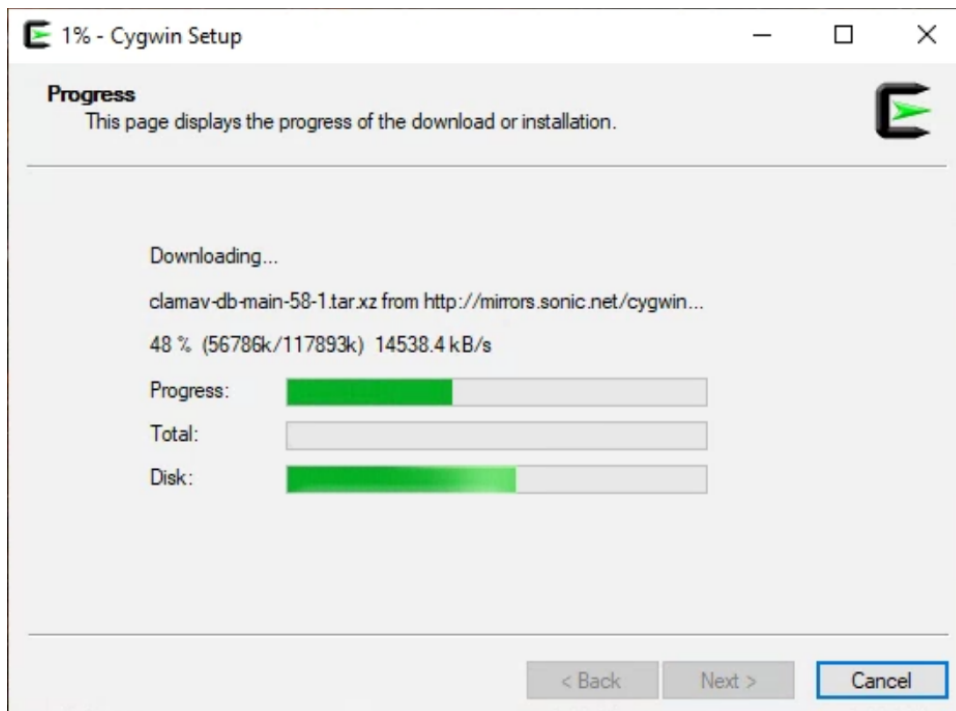


If you already have an existing Cygwin installation, the process will go through and remove the old versions and update to the current versions of the packages you want to install.



The process will then go on to download and install the packages chosen.

This will take a surprisingly long time. Just let it run.



When the process finishes, you will now be able to use the Cygwin environment.

There will be a new icon on your desktop to start up a terminal window running bash. Also, there will be in the Start menu a Cygwin folder that has an X11 server start, to allow the use of GUI-based programs from NAS to be displayed back on your local machine.